

Project Proposal

Proposal Title: Mill and Pack Creek Restoration

Proposal Number: 1419

DWR Region: Southeastern Region

Lead Agency: Other

County: Grand

Project Manager: Kara Dohrenwend or Alison McClusky

PM Phone: 4356133717

Regional Priority: High

Project Type: Terrestrial Habitat

Proposed Start Date: 07/01/2009

Project Location: The project includes sites along approximately 10 miles of Mill and Pack Creeks through Moab Valley in Grand County.

Project Description: The ongoing restoration project will use mechanical and hand cutting, extraction and herbicide, to remove tamarisk and Russian olive on 83 acres in the Mill and Pack Creek drainages.

Description of Problem/Need: Nonnative woody species, such as tamarisk and Russian olive, are displacing native plant communities along Mill and Pack Creeks in Grand and San Juan Counties. Pack Creek roughly parallels Mill Creek, joining it approximately 1 mile from the Colorado River. Increasing development pressures throughout the Moab valley make Mill and Pack Creeks essential wildlife corridors. In 1974 barely any vegetation was present along Mill or Pack Creeks through the valley. Community wide neglect of these corridors since then has resulted in a largely monotypic Russian olive and tamarisk corridor.

Many of the land owners and managers including the City of Moab, Grand County School District and some private landowners are increasingly concerned with the impacts of nonnatives on the riparian habitat, especially as this habitat is increasingly displaced by homes and developments. This project helps improve the primary wildlife links from the La Sal Mountains to the Colorado River along these riparian corridors. These corridors are an important link allowing larger mammals, as well as birds and other species, to access the river and wetlands areas in wintertime, and the mountains and canyons in summer without crossing roads or highly developed areas.

The Mill and Pack Creeks Restoration Proposal targets nonnative woody species to remove or retreat, and to revegetate areas where removal has already occurred. Russian olive trees, some over 45 feet tall, are the dominant invasive found along the creeks, as well as Siberian elm, tamarisk and mulberry trees. Fire and equipment are of limited use in much of this area due to the proximity of residences and businesses, and the use of the corridor for daily transportation. The hand work and some equipment work will be supplemented by in kind assistance from private landowners.

Revegetation will occur in some targeted areas and will include planting nursery stock, salvaged plants and pole and wattle plantings, as well as seeding. Trees to be used in replanting efforts include: cottonwood, willow (black and coyote where appropriate), box elder, river birch, and netleaf hackberry. Shrub species include: squawbush, new mexico privet, woods rose, and currants. Grasses and forbs include: alkali sacton, sand dropseed, blue grama grass, and giant dropseed.

Coordinated monitoring of revegetation response in removal sites along Mill and Pack creeks will allow the city and partners to better plan retreatment and revegetation activities and to better plan for future removal and restoration projects along the Pack Creek corridor and other similar riparian areas.

Because Mill Creek runs through the City of Moab, and past work has involved and future work will involve many land owners and volunteers this project provides great educational potential regarding invasive exotic issues, techniques and processes for revegetation, and research to track vegetation response to removal efforts.

Objectives: To expand invasive removal areas in the riparian areas of the primary watershed in Moab from work already in progress along Mill Creek. The project areas along Mill and Pack Creeks will improve habitat by reestablishing native plant communities in areas currently dominated by tamarisk, Russian olive and other woody invasive species. The expanded effort will include follow through in previously treated areas, and encourage coordinated and strategic participation by at least 10 private landowners along Pack Creek. Not only will this added area dramatically improve the riparian wildlife habitat and corridors in the Moab valley, but it will assist with jumpstarting the Community Wildfire Protection Plan in the Moab Valley through which future work can continue the effort all the way through Spanish Valley.

Relevance to Strategic Plans: Within WAP Riparian focus corridors in Moab Valley. This project directly furthers the goals of the regional plan of the SEUTP. In addition, by reducing seed sources it assists with reducing the spread of woody invasives in the adjacent Nature Conservancy preserve where more restoration is occurring, and BLM efforts to reduce woody invasives throughout the region.

An impetus for this project is to build momentum through increased removal and revegetation activities in Community Wildfire Protection Plan target areas which will increase funding available in the future. The increased activity in the lower, more visible areas of the creeks in Moab will not only help educate the general public about the need for invasive removal, but provide many sites for examples of best management practices and methods of revegetation.

Potential Risks: 1) Continuous fire hazard to native vegetation, 2) Loss of riparian habitat due to dominance of woody invasives 3) Threat to other areas of riparian habitat and residential areas from fire.

Proposed Methods: Pre project start : Jan 2009 through July 1 2009 :
Coordinate with land owners – organize work plans and enlist participation beyond initial committed parties; draft work plan specifics for each parcel.

Future Management (Specific plans that will ensure the long-term success of the project):
The City Of Moab and Rim to Rim Restoration have been working with other partners along Mill Creek in Moab to reduce the extent

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of woody invasives in the riparian zone since 2005. These organizations, and the private land owners who are partnering in 2008 and 2009 share a long term vision of a regenerated riparian area through town that is more resistant to fire threats and is a viable wildlife corridor through the developed areas of the city and county.

Furthermore, the community has completed a CWPP with the assistance of FFSL. This plan targets both riparian corridors as areas in need of fuels reduction, and will help ensure the larger vision of improving the riparian corridors throughout their lengths.

In addition, the BLM has worked in the past to remove and control large woody invasives in Mill Creek Canyon. Future work in this area will also ensure contiguous wildlife corridors stretch throughout the Moab valley to the mountains.

Much of the City owned land is also parkway land for bicycle and walking through town. These portions of the creek will continue to be maintained for this purpose. Private land owners who partner with this effort all contribute in kind or cash to initial removal work, and are committed to sustaining the advantage gained by removal work and maintaining native vegetation in the corridor.

July through September 2009:

Map project areas and finalize work plans throughout project area. Treatments will include mechanical, cut stump, chipping, extraction and some herbicide for removing non native invasives. Revegetation treatments will include planting potted stock, seeding, pole and wattle installations, and transplanting. Most of Pack Creek is privately owned, therefore landowner contribution of funds, materials or labor is required on all projects. Land owners identified with "definite private" shapefiles have already been active with removal or planning efforts, those marked "private" desire to participate in this community wide effort, and concrete plans are in progress as of the date of this proposal.

September 2009 through May 2010:

Follow up removal and revegetation at sites along Mill Creek

Initial removal and native plant protection in new sites along Pack Creek and at Anonymous City Park along Mill Creek at 500 W

Follow up seeding and/or planting at select removal areas

May 2010 and beyond: Monitoring of sites for re-treatment needs and revegetation potential

Shapefile Name: HPD 2010\GIS Shape Files - Proposals\SER\1419.shp

Seed Source: GBRC

UPCD Reg Team Coord Date: 12/02/2008

**Proposed
NEPA Action:**

**Proposed
Arch Action:**

☒ **Vegetation Monitoring** ☐ **Wildlife Monitoring**

Monitoring Information: All project sites will have vegetation transects established, or maintained if work has already begun on site. Rim to Rim Restoration has been coordinating monitoring of tamarisk and Russian olive removal projects along the Colorado River Corridor and Mill Creek since 2007, and plans to continue monitoring all these sites in 2008 through 2011. All monitoring will follow similar protocol.

Grazing Management: None applicable

SPECIES BENEFITING

Yellow-billed Cuckoo	Southwestern Willow Flycatcher	Bald Eagle	Lucy's Warbler
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LAND OWNERSHIP

Owner	Acres
Private	42
Moab	27
School District	12
Housing Authority	2
Total	83

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